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## ABSTRACT

This study examined the impact of preschoolers' knowledge of routine events, or scripts, on their conversational performance during dyadic pretend play with different discourse partners. The study was intended to investigate the success of preschoolers' communication with dyad members in matched and unmatched conditions, and to examine the ways in which preschoolers establish shared knowledge involving scripted events. Thirty preschool children, ages 4 to 5, were assigned to same-age and same-sex dyads and participated in a script-knowledge assessment and a communication assessment, each on different days. The results showed that preschoolers' interactions were more successful when both children shared knowledge of the script than when only one child had adequate script knowledge. Preschoolers accommodated discrepancies in level of script knowledge by engaging in communicative behaviors to establish shared knowledge with their partners. Older children were particularly skilled at appropriately establishing shared knowledge when needed. (AP)

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# Effects of Preschoolers' Script Knowledge on their Communicative Interactions

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## ABSTRACT

The impact of preschoolers' knowledge of routine events, or scripts, on their conversational performance during dyadic pretend play was examined. Previous researchers have found that preschoolers' communication is more successful if the dyad members have extensive knowledge of the scripted event than if they do not have adequate script knowledge (Furman & Walden, 1990). In naturally-occurring interactions, however, discourse partners often do not have equal levels of knowledge of the topic of interest. One purpose of the present study was to investigate the success of preschoolers' communication when both dyad members had extensive knowledge of the script (the matched condition) as well as when one member had extensive script knowledge and the other had incomplete script knowledge (the mismatched condition). When discourse partners have different levels of knowledge, a particularly important step is to establish each other's level of expertise and adjust one's speech accordingly. The second purpose of this study was to investigate the ways in which preschoolers establish shared knowledge involving scripted events.

## RESEARCH QUESTIONS

1. *Are the communicative interactions of dyads of preschoolers more successful when both children share knowledge of the script than when only one child knows the script?*
2. *Do preschoolers accommodate discrepancies in level of script knowledge by engaging in communicative behaviors to establish shared knowledge with their discourse partners?*

## METHOD

### Participants

Thirty preschool-age children (mean = 5;2 and range = 4;1 - 5;7) participated. The children were assigned to same-age, same-sex dyads on the basis of their performance on an assessment of script knowledge (described below). The members of each dyad had not previously met.

### Procedure

Each child participated in two sessions, each on different days: a script knowledge assessment and a communication assessment.

- **Script knowledge assessment.** In the first session, the child's knowledge of four scripted events (going on an airplane trip, baking cookies, going to the dentist, and doing laundry) was assessed in a picture identification and sequencing task. The task was to distinguish between script activities and non-script activities in a set of line drawings and to correctly sequence the script activities.

- **Communication assessment.** Each dyad participated in a 20-minute play session in which they were instructed to play together with child-sized script-based toys. Each dyad participated in a matched condition for half of the session and a mismatched condition for the other half, in counterbalanced order. In the matched condition, both members of the dyad previously had demonstrated extensive knowledge of the script on the picture identification and sequencing task. In the mismatched condition, one member previously had demonstrated extensive script knowledge and the other incomplete script knowledge.

- **Transcription and coding.** The discourse produced by the dyads during the play sessions was transcribed. Two versions of each transcript were coded: a total version, which contained all turns, and an on-script only version, which consisted of a subset of the total transcript and included only turns that were appropriate to the script. The transcripts were coded for measures of the success of the dyads' verbal communication (See Table 1) and measures of the strategies that the dyad members used to establish shared knowledge with each other (See Figure 2).

## RESULTS

1. *Yes, preschoolers' interactions were more successful when both children shared knowledge of the script than when only one child had adequate script knowledge. This was particularly true for the older children.*

- For the total version, there was greater topic maintenance and responsiveness to conversational obligations and fewer requests for clarification in the matched condition than in the mismatched condition (See Table 1). For the on-script only version, shared script knowledge also increased topic maintenance.

# TABLE 1

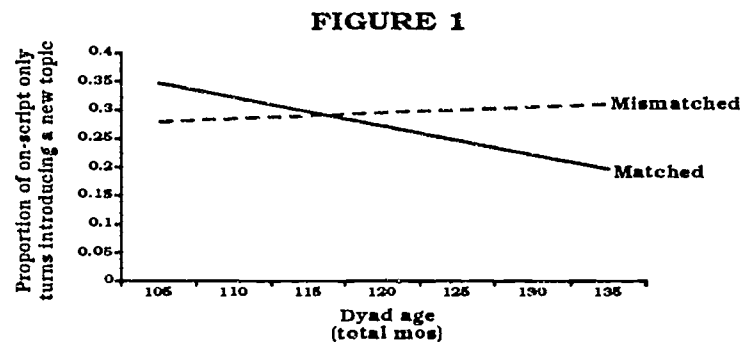
MEAN FREQUENCIES (& STANDARD DEVIATIONS) OF MEASURES OF COMMUNICATIVE SUCCESS

Measures	Total Version		On-Script Version	
	Matched	Mismatched	Matched	Mismatched
Number of turns	99.60 (25.99)	99.53 (27.76)	66.53 (17.66)	78.60 (29.56)
Number of utterance attempts/min.	20.09 (3.61)	19.22 (4.83)	-	-
Proportion of maintained topics	.63 (.08)	.59 (.08)*	.55 (.12)	.55 (.10)
Proportion of new topics	.23 (.07)	.29 (.06)**	.26 (.08)	.30 (.07)*
Mean length of topic maintenance	3.45 (.98)	3.19 (.48)	-	-
Proportion of script violations	.31 (.16)	.21 (.16)*	-	-
Prop. of failures to respond contingently	.18 (.14)	.17 (.15)	.21 (.17)	.21 (.22)
Prop. of failures to allow listener to respond	.004 (.01)	.05 (.04)**	.01 (.05)	.02 (.04)
Proportion of requests for clarification	.02 (.02)	.03 (.04)*	.02 (.02)	.02 (.02)

\* Different from the corresponding mean for the matched version at  $p < .05$

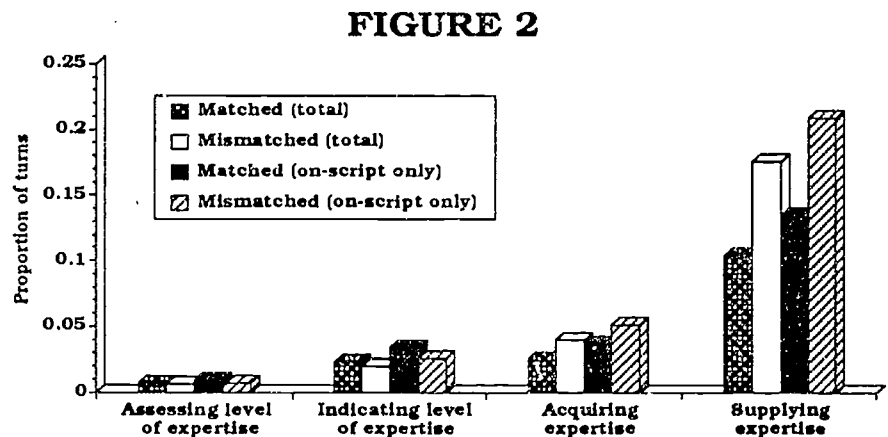
\*\* Different from the corresponding mean for the matched version at  $p < .01$

• As illustrated in Figure 1, on the measure of introducing new topics for the on-script only version, the difference between the matched and mismatched conditions increased with age (matched condition:  $r = .518$ , slope of within cell regression =  $-.005$ ,  $p < .05$ ; mismatched condition:  $r = .116$ , slope of within cell regression =  $.001$ , n.s.).

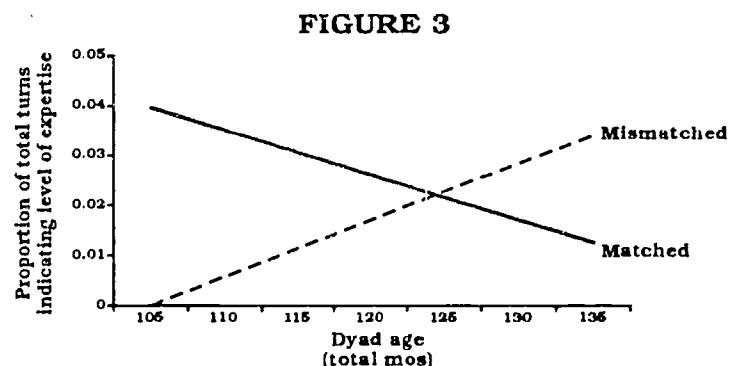


2. Yes, preschoolers accommodated discrepancies in level of script knowledge by engaging in communicative behaviors to establish shared knowledge with their discourse partners. Older children were particularly skilled at appropriately establishing shared knowledge when needed.

• As shown in Figure 2, the proportion of turns supplying expertise was higher in the mismatched condition than in the matched condition for both the total version ( $F[1,13] = 6.97$ ,  $p < .05$ ) and the on-script only version ( $F[1,13] = 6.06$ ,  $p < .05$ ).



• As illustrated in Figure 3, for the strategy of indicating level of expertise, there was an interaction between condition and age (mismatched condition total version:  $r = .410$ , slope of within cell regression =  $.001$ ,  $p < .06$ ; mismatched condition on-script only version:  $r = .415$ , slope =  $.002$ ,  $p < .06$ ; matched condition total version:  $r = .320$ , slope of within cell regression =  $-.001$ , n.s.; matched condition on-script only version:  $r = .333$ , slope of within cell regression =  $-.001$ , n.s.).



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